पशु स्वास्थ्य एवं जैविक उत्पाद संस्थान, मुक्तेश्वर (मध्य प्रदेश) का आधुनिकीकरण

1628. **श्री शिव प्रसाद च नपुरिया :** क्या प्रधान मंत्री यह बताने की कृपा करेंगे कि :

(क) क्या यह सच है कि मध्य प्रदेश सरकार ने पशु स्वास्थ्य एवं जैविक उत्पाद संस्थान, मुक्तेश्वर के आधुनिकीकरण तथा उसकी उत्पादन क्षमता को सुदृढ़ करने के लिए विज्ञान और प्रौद्योगिकी विभाग को 145.59 लाख रुपए का एक प्रस्ताव भेजा है ; और

(ख) यदि हां, तो सरकार उस पर कब तक आवश्यक स्वीकृति तथा अपेक्षित धनराशि मध्य प्रदेश सरकार को देगी ?

विज्ञान और प्रौद्योगिकी मंत्रालय, इलैक्ट्रानिकी विभाग और महासागर विकास विभाग में राज्य मंत्री और संसदीय कार्य मंत्रालय में राज्य मंत्री (श्री रंगराजन कुमारमंगलम) : (क) जी हां ।

(ख) संस्थान से यह अनुरोध किया गया है कि वे अपने परियोजना प्रस्ताव को परिशोधित करें । उनका परिशोधित प्रस्ताव अभी प्राप्त नहीं हुआ है ।

Cultivation of Algal

1629. SHRI S. MADHAVAN: Will the PRIME MINISTER be pleased to state·

(a) whether Government would take steps for mass scale cultivation of blue green algal like spirulina which have been identified as potential source of protein, and if so, what are the details thereof;

(b) what steps are being taken to produce non-conventional foods to bridge the protein gap in diet in our country; and

(c) whether Government are aware of the technology for mass culture and production of spirulina developed in Murugappa Chettiar Research Centre, Madras and if so, what are the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE & TECHNOLOGY DEPARTMENT OF ELECTRONICS AND DEPARTMENT OF OCEAN DEVELOPMENT AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS (SHRI P. R. KUMARAMANGALAM): (a) At present there is no plan for mass scale cultivation of blue green algal like spirulina by the Government since the technology has already been developed and transferred to the industries through indigenous efforts.

(b) No major efforts are being taken at the present time to produce non-conventional foods to bridge the protein gap in diet in the country based on algal material. The Murugappa Chettiar Research Centre, Madras, has, however, taken up the large scale nutritional supplementation using spirulina in a rural population of 5000 school children. The aim of the project is to provide supplementary Vitamin A and its precursors for overcoming blindness in children that is primarily caused by Vitamin A defiiciency. The project is supported by the Department of Bio-technology.

(c) Yes, Government is fully aware of mass culture technology for production of spirulina developed by Shri A.M.M. Murugappa Chettiar Research Centre, Madras. National Research Development Corporation was involved in up-scaling this technology. The technology has already been transferred to M/s New Ambadi Estates, Madras, for large scale production.